

ABSTRACT

A rotary compressor of the present invention includes a rotation mechanism (20) including a cylinder (21) having an annular cylinder chamber (50); an annular piston (22) contained in the cylinder chamber (50) eccentrically from the cylinder (21) and sectioning the cylinder chamber (50) into an outer compression chamber (51) and an inner compression chamber (52); and a blade (23) disposed in the cylinder chamber (50) and sectioning each said compression chamber (51, 52) into a high-pressure side and a low-pressure side, said rotation mechanism (20) compressing a fluid by relatively rotating the cylinder (21) and the piston (22). The outer compression chamber (51) serves as a low-stage side compression chamber (51) for compressing a low-pressure fluid into an intermediate-pressure fluid. The inner compression chamber (52) serves as a high-stage side compression chamber (52) for compressing the intermediate-pressure fluid compressed in the low-stage side compression chamber (51) into a high-pressure fluid.